# Guest Editorial: Math Anxiety and the Common Core

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As Common Core State Standards (CCSS) have begun to be introduced across the country, there is evidence that the CCSS in mathematics is generating new waves of "math anxiety" - first among teachers trying to meet the new standards, and then carrying over to students and their parents. The example in Figure 1 echoes the response to the introduction of the "New Math" 50 years ago: "*I don't get this. Why isn't the old way good enough?*" But, unlike 50 years ago, today there is a blogosphere available to parents and teachers. The conversation among teachers reveals that anxiety is mixed with resentment at having to learn new techniques that, from the teachers' perspective, have not yet been tested on *their* students, and is not like anything *they* learned in school. Indeed, the messages being shared online reflect disdain mixed with discomfort. Whether that combination will generate full scale rejection depends on the manner in which the CCSS is to be implemented. If there is a problem, and this problem is not addressed, Common Core may meet the same fate (rejection) as the "New Math".

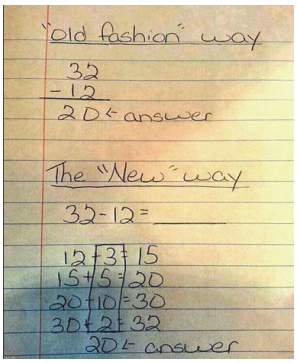

Figure 1. Common Core Math?

More troubling has been confusion about what teaching to the CCSS in mathematics actually entails. It is a common misconception that changing to CCSS means changing the math curriculum, which requires the teaching of "different" math, math that is unfamiliar to the teachers. A related misconception is that the CCSS eliminates standard algorithms for arithmetic in favor of a broad variety of approaches. These approaches are also unfamiliar, may be difficult to understand, and not as efficient. By itself, this may exacerbate a teachers' math anxiety. When job performance is evaluated through standardized test results, the problem becomes compounded.

The Common Core State Standards Initiative is attempting to clear up these misconceptions. On their web site (www.corestandards.org/), they maintain a "Myth vs. Facts" page. One of the statements on this page explicitly points out that "Common Core is *not* a curriculum" (emphasis in original). Instead, the Common Core is described as a set of "goals and expectations" articulating what will help students succeed in the classroom and beyond.

Misconceptions can also be confronted by examining the standards themselves, also available online. The thrust of the standards are to clarify and reorganize, not replace. In particular, the standards keep the standard algorithms. The appearance of the alternative approach comes from teacher training while in college or through professional development. The purpose is to help teachers identify strategies that students develop intuitively and use these strategies to guide students to the standard algorithms.

Clearing up misconceptions about the CCSS is important and may help with math anxiety at some level but will not be sufficient. Although not necessarily part of the CCSS itself, other reforms in the training of both preservice and inservice teachers require less rigid, more flexible approaches to otherwise familiar math. To help these reforms to be successful, all teachers should be encouraged to develop greater confidence in their subject matter knowledge.

Addressing the math anxiety problem with current reform goes beyond the implementation of the CCSS itself. Even if the Common Core movement is successful, there will be further reform and more change in the future. If curriculum change tends to trigger math anxiety, how will we ever reform? This is a problem worth solving.